

This is the monthly newsletter of the LANL Engineering Standards Program. The Standards are mandatory documents that apply to all personnel performing engineering and construction services for LANL, both programmatic and facility -- including new equipment and facilities and maintenance and modification of existing. [LIR 220-03-01]

Topics this month:

Website Re-design includes Google search
Sustainable Design Makes Leap Forward at LANL
Training Opportunities -- Standards, Drafting -- June 22
Standards Issued Last Month
UC-DOE Contract App G and Work Smart Standards Updated

The Standards Homepage: <http://engstandards.lanl.gov/>

WEBSITE REDESIGN INCLUDES GOOGLE SEARCH

The Standards Homepage above is being redesigned for a cleaner look and to highlight new items. A Google-based search feature has also been added, but use care -- it also returns historical documents, especially specs. Once you find the document you think you want, it's best to re-access it by drilling in from homepage.

SUSTAINABLE DESIGN MAKES LEAP FORWARD AT LANL

The month of May saw major advances in LANL's commitment to the environment. In addition to the Environmental Management System training everyone's doing as part of LANL's ISO 14001 certification, every LANL division is working on an Environmental Action Plan for energy efficiency and pollution prevention. The Standards Program is doing its part, too. There's now a new Sustainable Design Chapter 14 of the Engineering Standards. Among other things, it will ensure that future line item buildings are LEED Certified. A Sustainable Design Technical Committee was also formed to support the chapter.

LEED is the Leadership in Energy and Environmental Design Green Building Rating System, a voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

In addition, Rene Holaday in the ENG-DECS I&C/Commissioning Team has achieved certification as a LEED Accredited Professional (AP).

The difficult certification exam ensures the AP has the knowledge and skills necessary to participate in the design process, to support and encourage integrated design, and to streamline the application and certification process -- plus understanding of green building practices and principles, and familiarity with LEED requirements, resources, and processes. When a building project is going for LEED certification and an AP is involved in a project, then the project obtains an additional point toward LEED Certification.

ENG-DECS now has two LEED APs, the other being Michael Ladach; both are available for consultation on LANL building projects.

TRAINING OPPORTUNITIES -- STANDARDS, DRAFTING -- JUNE 22

Two standards courses are offered in June; register online or contact PS-13 at 7-0059.

Intro to LANL Engineering Standards Course 24140: June 22, 8-12 noon.

http://eshtraining.lanl.gov/pls/gencouraxs/Cour_By_Number?CourseNumber=24140

LANL Drafting Manual: Engineering Symbols, Prints, and Drawings Course 25103: June 22, 1-5 pm. http://eshtraining.lanl.gov/pls/gencouraxs/Cour_By_Number?CourseNumber=25103

STANDARDS ISSUED LAST MONTH (May)

ESM Chapters and Sections

Ch1, Sect. 200, rev 5 - Equipment & Component Numbering & Labeling -- New Section split off from 230 which became Functional ID listings only.

Ch1, Sect. 230, R5 (along with Attachments 1, 2, & 3) - Equipment/Component Functional IDs -- Revised IDs

Ch1, Sect. Z10, R2 - Gen. requirements for all disciplines/chapters (Added Applicability section; Under Code of Record section, added new rules for projects underway superseding LIR. Under Repairs & Alterations, changed 50% rule to Int'l Existing Building Code for building systems.

Ch7, Sect. D5010, r1 - Electrical Service & Distribution Systems -- Numerous revisions, see Record of Revisions section within document.

Ch7, Sect. D5020, R2 - Lighting & Branch Circuit Wiring -- Numerous revisions, see Record of Revisions section within document.

Ch8, Sect. D3060-F1050, R2 - I & C -- Added Appendix H on schematic (elementary) drawings

Ch13, Sect. Welding -- revised GWS Vol. 1, R1 for the following:

1-01-Modified 1.0.B & 5.2.1.e; added bullet 6 under Para. 1.0.E.2, clarified 5.2.A and 5.2.1.e, added 5.2.1 f & g, other minor editorial changes.

1-02 Added Para. 4.1.F, added management assessments; modified 5.2.B.

1-03 Minor changes to 5.1.A.1, 5.2.C, 5.5.B-C; added Att 7 Welding Checklist.

1-05 Change LANL welder designation

1-09 Para. 5.12.A Added filler material flow down requirements

1-10 Para. 5.0 Added course development and training staff requirements.

Ch14, Sustainable Design Requirements for Facilities, R2 - Moved from Z10 App A. Added waste min plan, IECC vice 90.1 option for GPPs, LEED Certified for line items

Drawings

New I&C Example Diagrams for use with Ch 8 App H:

E-6050, R0 - Machine X Schematic Diagram
E-6055, R0 - Panel Component Arrangement Diagram
E-6060, R0 - CP-1 Connection Diagram
E-6061, R0 - CP-1 Door Connection Diagram
E-6065, R0 - CP-1 to TBX-1 Interconnection Diagram
E-6070, R0 - Field Device Interconnection Diagram
E-6075, R0 - PLC-1 Input and Output Diagram

LANL Construction Specifications (Facility)

02310, R4 - Grading, Excavating, and Trenching
02320, R0 - Flowable Fill (NEW!!!)
02510, R3 - Bituminous Pavement
16711, R0 - Protected Transmission System (NEW!!!)

UC-DOE CONTRACT APP G AND WORK SMART STANDARDS UPDATED

App G, including the WSS, was updated in May. Latest at
http://labs.ucop.edu/internet/comix/contract/lanl_apndx_g.html

A sampling of changes of possible interest to Standards users:

Added DOE O 414.1B Quality Assurance, Attachment 2, Contractor Requirements Document (CRD) in lieu of 414.1A

Modified DOE O 440.1A, Attachment 2, Sections 6, 7, 8, 14 - Construction Safety, 16 - Firearms Safety, 18 - Industrial Hygiene, 19 -Occupational Medicine, 20 - Pressure Safety

Added DOE O 450.1 Environmental Protection Program

In accordance with DOE N 251.42 Cancellation Notice -

Remove the following canceled orders listed in LANL WSS:

DOE O 5480.21, 5480.22, 5480.23.

AL 5481.1B also removed from Appendix G

Add DOE O 231.1A Environment, Safety, and Health Reporting

Cancels the following orders in WSS:

Remove O 231.1Chg 2, O 232.1A, O 210.1, N 231.1 extending N 231.1.

Add DOE O 430.1B Real Property Asset Management

Remove O 430.1A LCAM in Appendix G.

Add DOE O 461.1A Packaging and Transfer for Transportation of Materials

Remove O 461.1 in WSS.

Add DOE O 420.2B Safety of Accelerator Facilities

Remove O 420.2A in WSS.

Add DOE M 440.1-1 Explosive Safety Manual most current version

Add the parenthetical "(including DOE Explosives Safety Committee approved changes through May 2004)".

Add DOE O 460.2A Departmental Materials Transportation and Packaging Management

Remove O 460.2 in Appendix G.

Add DOE O 450.1, Change 1 Environmental Protection Program

Updates O 450.1 in WSS.

LANL Bio Safety Standards

Update the standards currently included in WSS that have been approved by the CCB. This will include:

Replacement of "Biosafety in Microbiological and Biomedical Laboratories, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention and National Institutes of Health, 3rd Edition, May 1993" **with** "Biosafety in Microbiological and Biomedical Laboratories, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention and National Institutes of Health, most current edition".

Replacement of "Policy on Humane Care and Use of Laboratory Animals, Public Health Services, National Institutes of Health, Revised September, 1986, Reprinted March 1996" **with** "Policy on Humane Care and Use of Laboratory Animals, Public Health Services, National Institutes of Health, most current edition."

To request a change to this newsletter's distribution contact Tobin Oruch, oruch@lanl.gov.

Previous issues of this monthly Update are available via the "What's NEW in Stds: Monthly Update" link near the upper right of the Standards homepage <http://engstandards.lanl.gov/>

NOTE: There was no May 2005 Update (May changes are in this edition).

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